

INTERNATIONAL PRELIMINARY EXAMINATION REPORT
(PCT Article 36 and Rule 70)


| | | |
|---|--|--|
| Applicant's or agent's file reference 300269WO/JND | | FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416) |
| International application No. PCT/IB 03/02994 | International filing date (day/month/year) 01.07.2003 | Priority date (day/month/year) 01.07.2002 |
| International Patent Classification (IPC) or both national classification and IPC C12Q1/68 | | |
| Applicant PARTICLE SOLUTION AS et al. | | |

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

 These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:
 - I ☒ Basis of the opinion
 - II ☐ Priority
 - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV ☐ Lack of unity of invention
 - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI ☐ Certain documents cited
 - VII ☐ Certain defects in the international application
 - VIII ☐ Certain observations on the international application

| | |
|---|--|
| Date of submission of the demand 28.01.2004 | Date of completion of this report 26.07.2004 |
| Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465 | Authorized Officer Leber, T Telephone No. +49 89 2399-7195 |



**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/IB 03/02994**

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17):*

Description, Pages

1-23 as originally filed

Claims, Numbers

1-55 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
☐ the language of publication of the international application (under Rule 48.3(b)).
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority in written form.
☐ furnished subsequently to this Authority in computer readable form.
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

BEST AVAILABLE COPY

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/IB 03/02994**

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

1. Statement

| | | |
|-------------|-------------|------------------------|
| Novelty (N) | Yes: Claims | 2-21,23-36,38-44,46-55 |
| | No: Claims | 1,22,37,45 |

| | | |
|---------------------|-------------|------------------------|
| Inventive step (IS) | Yes: Claims | |
| | No: Claims | 2-21,23-36,38-44,46-55 |

| | | |
|-------------------------------|-------------|------|
| Industrial applicability (IA) | Yes: Claims | 1-55 |
| | No: Claims | |

2. Citations and explanations

see separate sheet

Re Item V

Reasoned statement under Art 35(2) PCT with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Basis for the assessment of novelty, inventive step and industrial applicability

1.1 Reference is made to the following document:

D1: WO 01/71732 A (MANZ THOMAS ;QIAGEN GMBH (DE); FABIS ROLAND (DE); RITT CHRISTOPH) 27 September 2001 (2001-09-27)

1.2 The documents WO 03/004151 and WO 03/004150 cited in the international search report have an earlier priority date than the present application and their subject matter may therefore be of relevance for the examination of the present application in its regional or national phase.

2. Novelty

2.1 Document D1 discloses magnetic particles capable of binding a target substance, comprising ferro- or ferrimagnetic glass particles having a surface which promotes disaggregation of the particles in the presence of a liquid phase (D1, page 1, line 26 - page 2, line 17; page 7, lines 8-17; page 8, lines 23-lines 32). The latter feature is inherent to the material used in D1 (D1, page 8, lines 23-33; see the description on bridging paragraph page 6-7). Thus, claim 1 lacks novelty over D1 (Art 33(2) PCT).

D1 moreover discloses the preparation of the said magnetic particles (D1, Examples 1-3 on pages 14 and 15) and a method of their use for the separation of a target material (D1, page 16, "Example 6"; page 17, "Example 7"). Thus also independent claims 22, 37 and 45 lack novelty over D1 (Art 33(2) PCT).

3. Inventive step

3.1 Dependent claims 2-21, 23-36, 37-44 and 46-55 appear not to contain any additional features which, in combination with the features of any claim to which they refer, meet the requirements of the EPC with respect to inventive step in the light

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/IB 03/02994

of D1 in combination with the standard knowledge of the skilled person.

4. Industrial applicability

- 4.1 The subject-matter disclosed in the claims 1-55 of the present application appears to be industrially applicable (Art 33(4) PCT).

BEST AVAILABLE COPY